DOCUMENT RESUME

ED 170 519 CE 020 471

TITLE	Project Mainstream: San Mateo Union High School District.
INSTITUTION	San Mateo Union High School District, Calif.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
BUREAU NO	41-69047-3-8-176
PUB DATE	14 Feb 79
NOTE	61p.
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Business Education; *Curriculum Development; *Disadvantaged Youth; *Handicapped Students; Home Economics Education; Individualized Instruction; Individualized Programs; Industrial Education; Learning Activities; *Mainstreaming; Program Evaluation; *Vocational Education; *Vocational Education Teachers; Workshops
IDENTIFIERS	*California (San Mateo)

ABSTRACT

A project was designed to involve vocational teachers in intensive "hands-on" workshop activities to develop information, materials, and strategies for vocational instruction and support for students with special needs. Thirty vocational teachers from business, homemaking, and industrial education were involved in a two-day workshop and in evening seminar/workshops during the fall of 1978. Workshops contained lectures, small groups, role playing, and environmental simulations concerning mainstreaming. The field testing phase of the project involved the teacher's use of an individualized instructional program form and the development of a profile for a disadvantaged or handicapped student in the teacher's class. Other participant activities included (1) taking a measuring unit which he/she used and revising it for slow learners; (2) adapt a unit now being taught and add a strategy so that it was easy for a disadvantaged or handicapped student to understand; and (3) supply the name of a person in the business community who was willing to be interviewed by a handicapped student. All participants were evaluated at various points in the project through questionnaires. It was concluded that most participants gained from the project in the areas of new information, understanding, communications, and planning. (CT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED170519

PROJECT MAINSTREAM

SAN MATEO UNION HIGH SCHOOL DISTRICT

PROJECT DIRECTOR — KURT KRUEGER

PROJECT NUMBER: 41-69047-3-8-176

PROJECT STARTING DATE: August 31, 1978

PROJECT ENDING DATE: February 14, 1979

"The activity which is the subject of this report was supported in whole or in part by the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred."

CE 020 471

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SAN MATEO UNION HIGH SCHOOL DISTRICT

DISTRICT BOARD OF TRUSTEES

Mr. Joseph Castelli

Mrs. Elizabeth Curtis

Mrs. Carol Gonella

Mr. Donald Langendorf

Mrs. Ruth Steiner

SUPERINTENDENT OF SCHOOLS

Dr. Austin P. Sellery

COORDINATOR OF CAREER AND VOCATIONAL EDUCATION

Dr. Curtis G. Larson

TABLE OF CONTENTS

	Page
INTRODUCTION	1
OBJECTIVES	3
PARTICIPANTS	5
PARTICIPANT SUMMARY FORM	6
WORKSHOP	7
GUEST PRESENTATIONS	9
SEMINAR ACTIVITIES	11
INDIVIDUALIZED INSTRUCTIONAL PROGRAM	12
MEASURING UNIT	18
ADAPTATIONS	24
BUSINESS CONTACTS	28
HANDICAPPING ABBREVIATIONS	29
INSTRUCTION TOPICS	30
INDIVIDUAL CONTRACTS	31
EVALUATIONS	33
OUTCOMES	46
CONCLUSIONS	50
CERTIFICATE OF RECOGNITION	51
RELATED RESEARCH	52
DISSEMINATION	54
FOLLOW UP SUGGESTIONS	55

INTRODUCTION

The San Mateo Union High School District has had a very stable, but slightly declining, student population over the past few years. The static population and the tight employment market for teachers have resulted in the district's having a very stable faculty most of whom are now between 40 and 60 years of age. Many of the district teachers in one way or another have expressed a need for inservice training in order to provide improved vocational instruction and support for students with special needs. This project was designed to involve approximately 30 vocational teachers in intensive "hands on" workshop activities to develop information, materials and strategies in the following areas:

- Compliance with Public Law 92-142, how it applies specifically to the vocational education teacher.
- How the vocational education teacher will need to relate to the special education teacher and the admissions committee.
- Who will be responsible for writing student individual educational plans.
- Developing vocational teacher ability to develop and implement Individual Instructional Plans for handicapped vocational program students.
- Developing teacher competency in providing direct services to students who are culturally, socially or educationally disadvantaged.
- Increasing vocational teacher competency in classroom counseling and guidance in ways which are free of sex bias and sex stereotyping.
- Increasing vocational teacher resources of information regarding nontraditional employment for women and nontraditional employment areas for men.

In order to reach the goals and objectives of the program, 30 vocational teachers from business, homemaking and industrial education were involved in an intensive two-day workshop just prior to the beginning of the fall semester 1978 and eight evening seminar/workshops held during September, October and November, 1978. Teachers were able to try out their newly developed skills, materials and strategies during the field testing phase of the program which extended from November 1978 through January 1979.

We have through this mainstream project developed a trained nucleus of teachers within each vocational department in each building who can not only provide improved services to their own vocational students with

special needs, but who can also act as trainers and consultants for their departmental colleagues when they are confronted with handicapped students mainstreamed into their courses. It is planned that the workshop participants will also act as trainers and liaison persons for improved services to disadvantaged students and sources of information in each department regarding bias free technical and classroom guidance materials. We further hope that the stimulus of workshop activities and the opportunity for field testing of ideas and materials during the project have improved the services not only to the disadvantaged and handicapped students but to the regular vocational students as well.

OBJECTIVES

The main objectives of Project Mainstream were:

1. The project director will be responsible for the following tasks:

   - Arrangement of classroom and career center space
   - Completing contracts with the presenters and the third party evaluator
   - Managing the process for each of the three phases of the project

   Evaluation: Contracts, room schedules and lists of personnel will be available for evaluator verification.

2. Vocational program teachers will acquire an understanding of the requirements of PL 94-142 and how this major piece of legislation affects the student composition of their classes.

   Evaluation: Teachers will actively participate in the workshop activities and will be able to describe how their programs may be affected.

3. Vocational program teachers will develop the knowledge to participate in writing Individualized Instructional Plans for those students who will be mainstreamed into their classes.

   Evaluation: Each teacher will develop one or more IIP's to be used as samples during the field testing phase.

4. Each project participant will be assisted to select and/or develop materials and instructional strategies to improve the support services for handicapped students enrolled in his/her classes.

   Evaluation: Each project participant will develop a personal strategy and information resource file to be used when field testing and when helping other teachers. Resource files will be available for evaluator verification.

5. Each project participant will be assisted to develop materials and instructional strategies to improve the learning environment for disadvantaged students enrolled in his/her vocational classes.

   Evaluation: Each project participant will develop a resource file for use with disadvantaged students. The files will be available for evaluator verification.

6. Vocational program teachers will receive and discuss information about nontraditional career and job opportunities for women, minorities and handicapped individuals so they can better counsel their vocational students.

   Evaluation: Program participants will be able to discuss the information received and how they utilized the materials during the field testing phase of the project.

7. Vocational program teachers will be assisted to develop the skills necessary to serve as consultants and resource persons to other vocational teachers in their departments for developing Individualized Instructional Plans and for implementing improved curricular services for disadvantaged and handicapped students.

   Evaluation: Each program participant will maintain a log of the consulting activities with his/her school.

8. The project director will assemble sets of resource documents covering services, instructional materials and instructional strategies which can be reproduced and distributed to district vocational teachers, other school districts, and the California State Department of Education.

   Evaluation: The dissemination packages will be completed within 10 workdays following the final evaluation of the project.

9. The materials and strategies developed during the workshop phases of the program will be field tested during the fall semester of 1978-79.

   Evaluation: The project director and district coordinator of career and vocational education will observe and interview participants during the field testing phase. Observation notes will be used in writing the interim and final evaluations.

10. The project activities will be evaluated by the project director and the district coordinator of career and vocational education at the conclusion of the two-day workshop, the eight seminar sessions and the end of the field testing phase.

    Evaluation: Observation notes and teacher evaluation questionnaire responses will be included in the evaluation reports produced at the end of each phase of the project.

11. A third party evaluator will assess the project activities at the end of the inservice phase and complete a final evaluation at the end of the field testing phase in February 1979.

    Evaluation: The final evaluation documents will be included with the dissemination package and the claim for funds.

Dr. Robert Weisgerber
Third Party Evaluator

Kurt Krueger
Project Director

Dr. Curtis Larson
District Evaluator

PARTICIPANTS

Henry Adams
Arnold Baines
Darlene Baines
Tom Barton
Andy Bartson
Tullio Bertini
Bill Campau
Julian Cane
Cloyce Frazer
Jim Friedman
Sally Gallagher
Georgia Hetzner
Marie Johnson
Jack Jones
Richard Laverty
Carl Leijon
Mary Livingston
Lloyd Mast
Jim Nameth
Betty Nelson
Allen Rasmussen
Gloria Rydingsword
Andy Schreiber
Roger Selsback
Ted Sibley
Theda Siebert
Greg Snyder
Pearl Turner
Fran Valentine
Carol Wilson

VOCATIONAL EDUCATION PERSONNEL TRAINING

PARTICIPANT SUMMARY FORM

1) Title of Project PROJECT MAINSTREAM

2) Name and Address of District, College, or School San Mateo Union High School District, 650 North Delaware Street, San Mateo, CA 94401

3) Name of Project Director and Title Kurt Krueger, Project Director

4) Project Number 41-69047-3-8-176

5) Total Number of Participants (Unduplicated count) 30

6) Total Participant Hours (Total number of hours of conducted training actually attended and totaled for all participants) 904

Please Classify the Total Number of Participants by the Following Types:

7)

PARTICIPANTS	American Indian		Black		Chicano		Oriental		White & All Others		TOTALS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Teacher	-	-	-	-	-	-	-	2	18	10	30
Supervisor											
Paraprofessional											
Counselor											
Administrator											
Media Specialist											
County Staff											
State Staff											
Other (Specify)											
TOTALS											

8) LEVEL

Junior High _____ ROP/C _____ Community College _____

High School ✓ Adult _____ Other (Specify) _____

9) COMMUNITY 10

Urban _____ Suburban ✓ Rural _____

10) On a separate sheet, please list all local educational agencies represented in training activities and the number of participants from each agency. - only our district involved

WORKSHOP

The opening session of Project Mainstream was an intensive two-day workshop by Barbara Aiello of The Learning Institute of Palo Alto. Barbara Aiello has been both a special and a regular class teacher, has taught vocational classes, has worked with a wide variety of handicapped children, conducted mainstreaming workshops all over the country and is the former editor of the practical journal, Teaching Exceptional Children. She has written and edited numerous books and articles on mainstreaming and is a regular contributor to the educational supplement of The New York Times on handicapped issues.

The workshop program rested on two key assumptions: (1) that mainstreaming should be done because it will benefit both handicapped and non-handicapped children, and (2) that mainstreaming can be done without undue stress in the industrial arts, business and home economics classroom. The workshop gave prime attention to the following critical issues through lectures, demonstrations and "hands on" experience:

- How to comply with new federal and state mandates
- What changes to make in the physical environment of the school and classroom
- How to develop curriculums and materials that will meet the needs of a more diverse class
- How parents can help
- How to prepare students
- What specific adaptations will need to be made in industrial arts, business and home economics classes

By using lectures, small groups, role playing and environmental simulations, Mrs. Aiello changed the atmosphere of learning often enough to keep the interest of the teachers involved. The sessions benefited greatly from the interest shown by five special education teachers and a school psychologist who voluntarily attended the sessions. The vocational educators and the special educators blended their talents to discuss many of the current issues facing the mainstreaming process in vocational education.

The main areas of Mrs. Aiello's presentation dealt with the objectives of Phase I. The fully completed objectives were:

1. PL 94-142 and Section 504 information were presented at several times during the two days in ways where it could be directly applied by the teachers in working with each other and planning for mainstreaming. Mrs. Aiello's book, Mainstreaming: What It Is and What To Do About It, has excellent reference materials from PL 94-142.

2. Each participant received information and participated in small group activities which helped to develop skill in informal assessment techniques and in how to observe students when doing informal learning tasks. The dangers of too heavy reliance on formal tests were discussed. Teachers were aided to observe starting behaviors, look for learning styles and to use the multi-sensory approach rather than the traditional pencil and paper tests. The usefulness of a question and answer session with the student being observed was clearly demonstrated.

3. On two separate occasions, teachers were divided into six-person groups and used simulation materials to assume the roles of parent, principal, regular teacher, special education teacher and shop teacher, and to develop an IEP based upon their deliberations as an admissions committee. At the end of each exercise, the actual IEP was presented and the IEP's developed by the workshop groups appeared as good as the IEP developed by the actual committee.

4. Cooperative special education and regular teacher team efforts and special curriculum, grading and equipment adjustments were included in the pre-IEP activities and reinforced in discussions following group developed IEP's.

Mrs. Aiello blended her verbal and "hands on" style of teaching to provide a meaningful two days for both the vocational education and special education teachers involved in the project. She should be seriously considered for any project of this type as the lead-off speaker because she brings with her a very positive atmosphere which carries through the entire project.

GUEST PRESENTATIONS

The eight evening session guest presentations were selected on the basis of the varied relationships to the field of mainstreaming in a vocational, high school setting. Each of the presentations concentrated on a central theme--rehabilitation, behavior modification, advocacy groups. Two of the presentations involved "hands on" experiences for the vocational educators and two presentations were given at the on-location training sites. Presentations were limited to a maximum of one and one-half hours for the entire presentation, including questions.

The first presentation was by Dr. Robert Bradfield of the Special Education Department, San Francisco State University. Dr. Bradfield dealt with the process of behavior modification and its relevance to a vocational, high school setting. Dr. Bradfield discussed projects he has directed which have dealt with disadvantaged and handicapped students, and their relevance to mainstreaming in high schools today. He also presented behavior modification examples which may be used in vocational classes to motivate both disadvantaged and handicapped students. Dr. Bradfield finished his presentation with a group discussion of grading systems which may be used to obtain a maximum performance from handicapped students, regardless of their handicap.

The second presenter during the evening sessions was Cheryl Rubin, a learning disability specialist for the San Mateo County branch of the Department of Rehabilitation. The Rubin presentation opened with the showing of a film, "A Better Tomorrow", which is a public relations film showing the roles of the Department of Rehabilitation. She then went on to describe the process involved in the referral of a high school student to the Department of Rehabilitation. The talk concerned itself with the role of facilitator between schools and community agencies. This linkage includes vocational testing, evaluations, job skill instruction, tutoring, transportation and tools.

The third presentation was by Mrs. Winifred Washburn, a teacher of learning disabled students at Terra Nova High School, and the author of "Vocational Entry Skills." Her talk dealt with what she termed the "ABC's" which stands for: All the Facts, Bypass Methods of Instruction, and Curriculum Adjustment. Mrs. Washburn stressed the importance of each vocational teacher's knowing something of the causes and symptoms of learning disability children. Case studies were provided to give class members a "hands on" opportunity to assess methods of dealing with individual learning problems in students.

The fourth presentation was given by Mrs. Jean Wofford of the Direction Service Model located in San Bruno. The Model is a federally funded project

which is run as an information referral services concept. The Model provides educational personnel help in locating community resources to provide help in developing new educational materials and strategies for their individual classrooms. Mrs. Wofford also discussed the types of agencies available in San Mateo County, ranging from very general--American Red Cross, Volunteer Bureau--to very specific--Poplar Center, KAINOS.

The fifth presenter was Shirley Bishop of PARCA (Peninsula Association For Retarded Children and Adults) located in Burlingame. Ms. Bishop gave a slide presentation which portrayed the work of PARCA in bringing retarded persons into the work force. Class members then engaged in a group discussion which involved the topics of special olympics, incidence and types of retardation, expectations of retarded youth in vocational programs, and ways in which PARCA raises money for their volunteer programs.

The sixth session was hosted by Poplar Center in San Mateo. This on-site presentation was given by Mrs. Elsie Vickery who explained the varied programs at Poplar Center which range from nursery school level to landscape gardening, adult independent living in the community, and sheltered workshop employment. The workshop has developed and maintained contract work with private industry. A television videotape was shown depicting a vocational gardening and landscaping project run by the Center. The class members were then taken on a tour of the facility and shown many of the jigs and fixtures developed by both the staff and the handicapped workers.

The seventh session was held at the Easter Seal Workshop in Burlingame. A panel discussion was given by the Easter Seal staff to illustrate each of the job descriptions and duties of each position. After this, the panel leader, Cheryl Cairns, led a question and answer session. The class was broken into small groups and given a tour of the facility which included a "hands on" Valpar assessment, contract service procedures, production line work, and community and outside agency job placement.

The last session was given by Janice Krones of the Center For Independent Living located in Berkeley. Mrs. Krones, who is confined to a wheelchair, conveyed the idea that handicapped are not only not helpless but are becoming a driving force in the community. She provided a videotape showing the various functions of the Center For Independent Living. The highlight for the class members was Mrs. Krones' description of her own experiences in the educational "mainstreaming" process. Being in a wheelchair was not so great a handicap as was peer pressure. The members of the class were then given ample time for a question and answer period.

SEMINAR ACTIVITIES

Each participant in the project was asked to do the following activities during the eight nightly seminar sessions:

1. Develop an Individualized Instructional Program (IIP) for a disadvantaged or handicapped student currently enrolled in his/her class.
2. Develop a one-period unit on any type of measurement.
3. Revise a unit which he/she is now teaching to give disadvantaged or handicapped students an aid to learning.
4. Establish a business contact for learning disabled students.
5. Identify and discuss abbreviations dealing with handicapping conditions.

Each teacher was given time during the three-hour seminar sessions to accomplish the assigned activities. Many of the teachers took on the responsibility of working on their own time to complete the assignments.

INDIVIDUALIZED INSTRUCTIONAL PROGRAM

As part of the field testing phase of the project, each participant was given a district IIP form (see page 13), and requested to develop a profile for a student in his/her class. This student had to be either a disadvantaged or handicapped student in class this semester.

Since our district is one of the few to use both an IEP form (mandated) and an IIP form, each participant had the freedom to develop a very individualized approach within the IIP's framework. The following pages give some examples of the work accomplished.

After writing the IIP form, participants were encouraged to implement the programs stated to find out how well each student did in relationship to the objectives given on the IIP form.

SAN MATEO UNION HIGH SCHOOL DISTRICT
Department of Special Education

INDIVIDUALIZED INSTRUCTIONAL PROGRAM
(E.H. Student)

DATE _____

STUDENT _____ SCHOOL _____

Educational goal: _____

_____

Instructional objective:
Anticipated level of attainment _____

_____

Performance criteria to be used _____

_____

_____

Expectations in accordance with the following time line:

_____

_____

_____

_____

Specific instruction required or to be tried to attain the goal:

_____

_____

_____

_____

Student strengths on which to capitalize:

_____

_____

_____

_____

_____ _____
Student's Signature Teacher's Signature

SE 21
2/78

SAN MATEO UNION HIGH SCHOOL DISTRICT
Department of Special Education

INDIVIDUALIZED INSTRUCTIONAL PROGRAM
(E.H. Student)

DATE 12/6/78

STUDENT Arthur SCHOOL Mills

Educational goal: Learn measurement necessary for basic woodworking practice.

Instructional objective:
Anticipated level of attainment Be capable of reading a bench rule, try square, combination square, or measuring tape to an accuracy of 1/16 inch.

Performance criteria to be used Student will be tested by being given a drawing of a woodworking project. He must extract the required size information and transfer the dimensions to stock to be cut using any of the above mentioned measuring instruments.

Expectations in accordance with the following time line:
One semester will be allowed for the required learning to take place.

Specific instruction required or to be tried to attain the goal:
Training aids to be utilized: (1) oversize try square (2) wall chart of an enlarged inch broken down into sixteenths of an inch (3) actual measuring instruments. The student will be given daily exercises with the training aids. The larger divisions will be mastered first (halves and quarters), then instruction will continue down to sixteenths.

Student strengths on which to capitalize:
Arthur has the attainment of skill in woodworking as a personal goal so that he is motivated to master the ability to measure. He does not have any visual acuity problem. Arthur's parents are eager to have him reach his educational goal and will be supportive.

Student's Signature

Teacher's Signature

SE 21
2/78

SAN MATEO UNION HIGH SCHOOL DISTRICT
Department of Special Education

INDIVIDUALIZED INSTRUCTIONAL PROGRAM
(E.H. Student)

DATE 11/13/78

STUDENT Kelly SCHOOL Capuchino

Educational goal: Successful completion of the job skills competency unit on making change.

Instructional objective:
Anticipated level of attainment No error limit on practice materials, 90% or above on posttest.

Performance criteria to be used Successful completion of the posttest on making change with 90% accuracy using the "add on" method of making change.

Expectations in accordance with the following time line: Kelly will be able to:

9/22/78 - (1) Count the bank by denomination, place it in the till and complete the Cash Report with 100% accuracy.

10/6/78 - (2) Give change for a series of cash transactions with 100% accuracy.

10/12/78 -(3) Complete a cash proof form & balance with 100% accuracy with no overs or shorts.

10/13/78 -(4) Complete posttest.

Specific instruction required or to be tried to attain the goal:
Student working papers and manual on making change supplemented with:

Making change flash cards--used in conjunction with a till and a partner.

Taped drill instruction.

Drill practice on the computer terminal.

Student strengths on which to capitalize:

Social--can work well independently or with a partner.

Test scores--Reading 4.4, Spelling 4.0, and Math 6.3.

Learns best visually.

Student's Signature

Teacher's Signature

SE 21
2/78

SAN MATEO UNION HIGH SCHOOL DISTRICT
Department of Special Education

INDIVIDUALIZED INSTRUCTIONAL PROGRAM
(E.H. Student)

DATE 2/1/79

STUDENT Ronald SCHOOL Burlingame

Educational goal: Achieve 5 competencies in 9 weeks, that is, become competent in 5 of posted 25 competencies.

Instructional objective:
Anticipated level of attainment First objective is to learn to control oxyacetylene flame (4 days).

Performance criteria to be used Ronald will learn to adjust valves, ignite acetylene, adjust flame and adjust oxygen to neutral flame. Then he will hold the blue flame just short of tin cans and move the flame to cut and design; practice until he can control distance of blue flame while cutting a pre-thought design.

Expectations in accordance with the following time line:
First day: Light up and shut down torch a series of times; when that is smooth, cut some straight lines on a can lid. Second day: Light up, shut down torch, light up and cut lines on tin can. Third & fourth days: Experiment with lighting up and cutting designs until they can be cut quite accurately and the edges are left quite smooth.

Specific instruction required or to be tried to attain the goal:
(1) oxyacetylene welding; (2) fusion welding; (3) bronze welding; (4) cutting; and (5) MIG welding and forming with hammers, dollies, and slide hammer. (Five competencies) Provide Ron with some bent fenders and then allow him, if he wishes, to redesign shapes to conform to his idea of a better shape.

Student strengths on which to capitalize:
Ronald is very interested in automechanics and in body work. Plan to use this drive to move him to learn oxyacetylene and MIG welding, using some fenders and body sections to repair and weld together. He comes to school regularly and we will have work ready for him on a daily basis.

Student's Signature

Teacher's Signature

SE 21
2/78

SAN MATEO UNION HIGH SCHOOL DISTRICT
Department of Special Education

INDIVIDUALIZED INSTRUCTIONAL PROGRAM
(E.H. Student)

DATE 10/15/78

STUDENT Sally SCHOOL Hillsdale

Educational goal: Complete a tailored garment by January 24, 1979, using the techniques for a hand tailored collar and putting a lining in by hand.

Instructional objective:
Anticipated level of attainment Student will be able to read instructions and comprehend verbal and written directions.

Performance criteria to be used Student will learn to identify and use fabrics, interfacing, linings, buttons, thread, needles, pins, scissors, pin cushion, seam gauge, seam ripper.

Expectations in accordance with the following time line: Steps in completing the project: 10/20---Pattern selection; 10/22---Pattern fit; 10/29--Lay and cut out; 11/3--Mark; 11/20--Sew darts & seams, first fitting; 11/24--Adjustments; 12/10--Undercollar roll line marked, pad st and preparation; 12/17--Top collar and facing; 1/2--Sew collars to garment; 1/7--Sleeves; 1/15--Hems; 1/23--Cut lining; 1/25--Sew lining; 1/27--Hand-set lining; 1/29--Shank buttons; 1/29--Final press and evaluation.

Specific instruction required or to be tried to attain the goal:
Demonstration of exact techniques to be used as they are required.
Teacher and one student aide.

Student strengths on which to capitalize:
1. Will see projects through to completion.
2. Very willing to work extra time to complete projects.
3. Can follow directions when shown what to do.

Student's Signature

Teacher's Signature

SE 21
2/78

MEASURING UNIT

Each participant was asked to take a measuring unit which he/she is now using and to revise it to give better understanding to slow learning youth. The emphasis of this unit was to develop a product which could be shared.

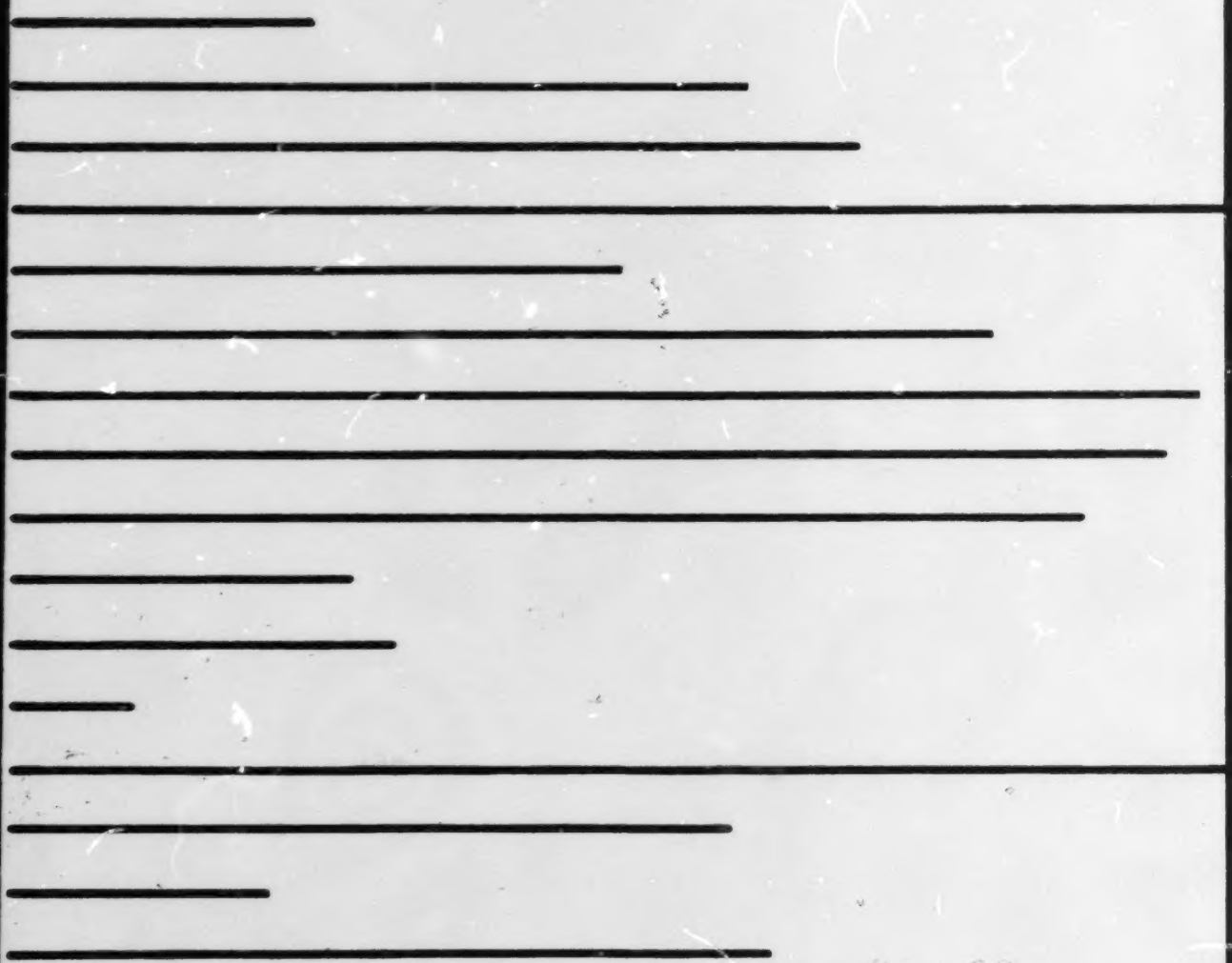
The example presented by the project director is shown on pages 19 and 20, with examples of participants' work on pages 21-23.

The participants found that most of their work was done in the areas of

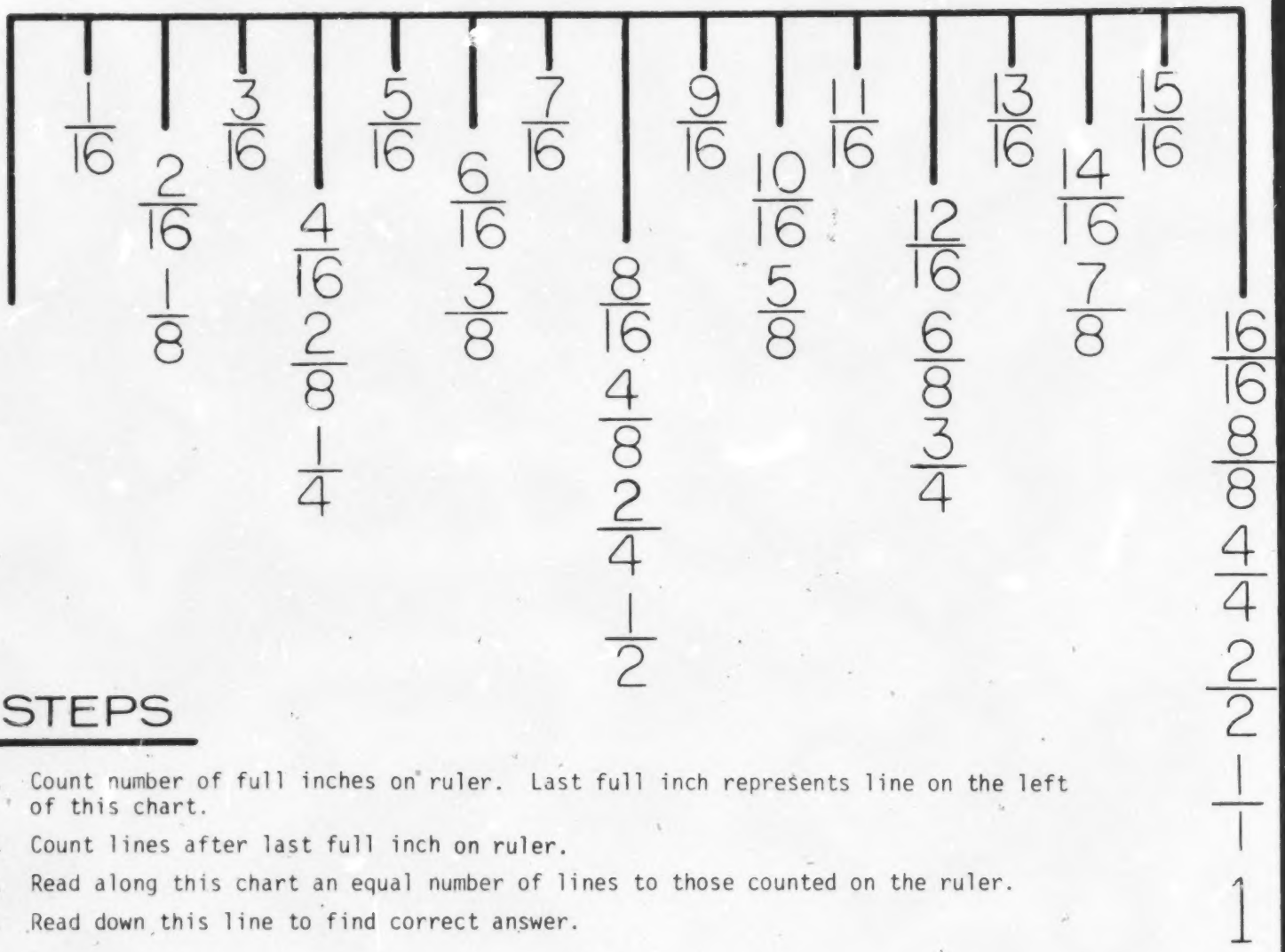
- Step by step work
- Making work more visual
- Making work larger and easier to read
- Making handouts to reinforce original handouts
- Making pictograms instead of giving numbers.

Reading A Ruler

PLACE ANSWER TO THE RIGHT OF EACH LINE. BE ACCURATE.



Parts Of An Inch



STEPS

1. Count number of full inches on ruler. Last full inch represents line on the left of this chart.
2. Count lines after last full inch on ruler.
3. Read along this chart an equal number of lines to those counted on the ruler.
4. Read down this line to find correct answer.

PROJECT MAINSTREAM

A Measurement Unit oi Instruction

Micrometer

- Show the various micrometers to the class
- Tell the purpose of micrometers
- Define the parts of a micrometer
- Draw on the board (rather large) the following diagram:

- Tell the various meanings and value of lines
- Show examples on overhead projector or on slides
- Answer questions
- Give a non-graded test

PROJECT MAINSTREAM

A Measurement Unit of Instruction

Steps to follow in establishing the margins of a 60-space line:

1. Standard typewriting paper is 8½ inches wide.

2. "Elite" typewriters have 12 spaces per inch horizontally.

3. 8½ inches times 12 spaces per inch equals 102 spaces across the paper--edge to edge.

4. The 60-space line should be placed in the center of the paper.

5. Although one half of 102 spaces would be 51, we simplify this and use 50 on the typewriter scale as the centering point of the paper.

6. Divide the 60 spaces of the line desired by 2--30 spaces. These 30 spaces should be placed to the left of the center (50) and the other 30 spaces should be placed to the right of the center to establish the left and right margins.

   Illustration:

Left Margin--20 CP=50 Desired Right Margin--80+5=85*

/ -30 / +30 / /

*85 is the actual setting of the right margin--always add five additional spaces to the desired right margin.

Additions to the above:

1. 60-space line is considered the average line length to be used on the typewriter.

2. Other than "elite" typewriters, we have "pica" typewriters which have 10 spaces per inch. The most popular size of type, however, is "elite."

PROJECT MAINSTREAM

A Measurement Unit of Instruction

Memorize the following--know the abbreviations:

3 t. = 1 T.
16 T. = 1 c.
2 c. = 1 pt.
2 pts. = 1 qt.
8 oz. = 1 c.

Find out the following measurements:

3 t. = 1 Tablespoon
8 T. = 1/2 c.

8 / 16 T. in 1 c. 1/2

Divide the bottom number into the bracket / 16 and multiply by the top number.

12 T. = 3/4 c.

3/4 x 4 T. = 12 T. / 16 T. 16

4 T. = 2 oz.

2 oz. / 8 oz. into 1 c. x 2 = 4 T. / 16 T. in 1 c.

48 tsp. = 1 c.

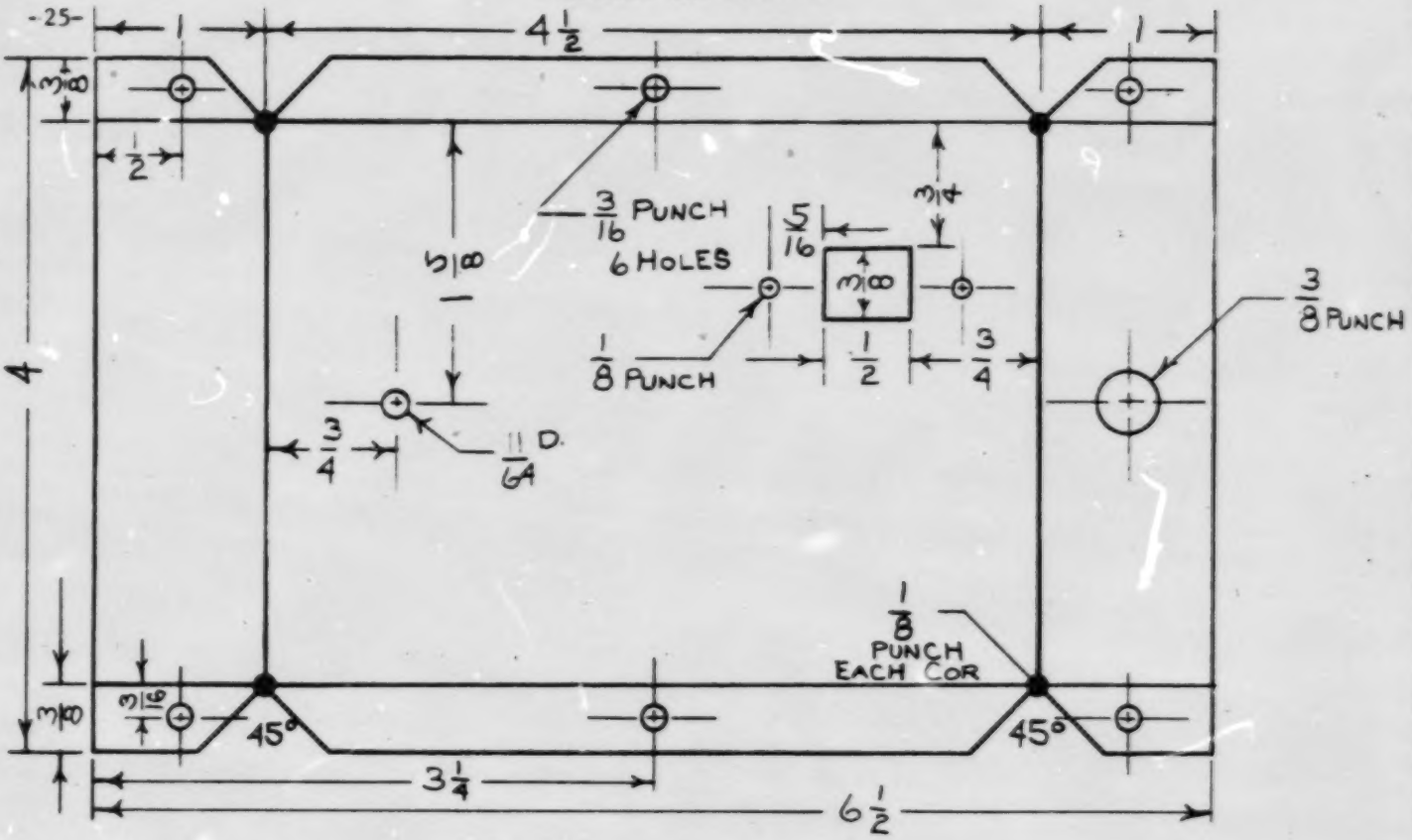
16 T. = 1 c.
x 3 tsp. = 1 T. / 48 tsp.

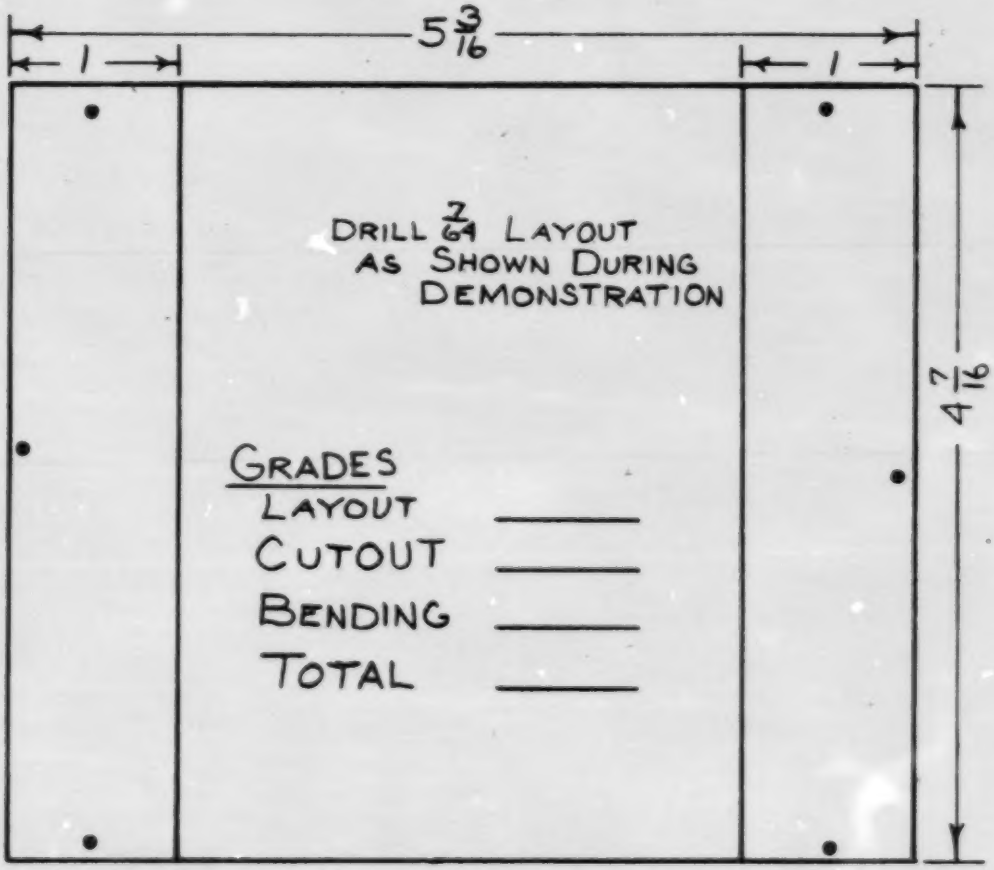
ADAPTATIONS

During the project, each participant was asked to take a part of a unit now being taught and add a strategy to make the unit easier to understand by a disadvantaged or handicapped student. Each participant was given guidelines to work within, but could be as imaginative as he/she wished to be in developing the necessary materials.

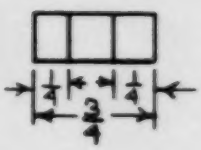
The following two pages illustrate the basic format used in an electronics unit on chassis construction and the supplementary information to be given to students who are having difficulty in comprehending the information and need a step-by-step reinforcement of the fabrication process of producing the chassis.

The instructor also included a check circle for each step of the process so that the student and teacher would have constant contact during this phase of the project.

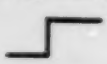




DRILL 7/64 LAYOUT AS SHOWN DURING DEMONSTRATION



BEND AS FOLLOWS



GRADES

LAYOUT _____

CUTOUT _____

BENDING _____

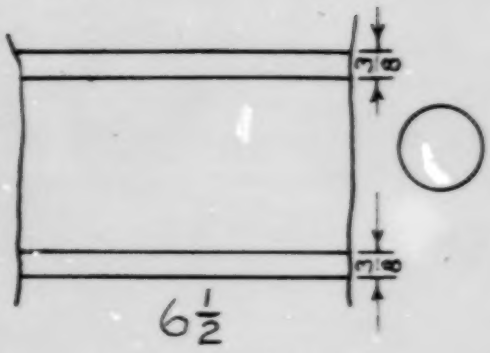
TOTAL _____

CHASSIS CONSTRUCTION PROJECT

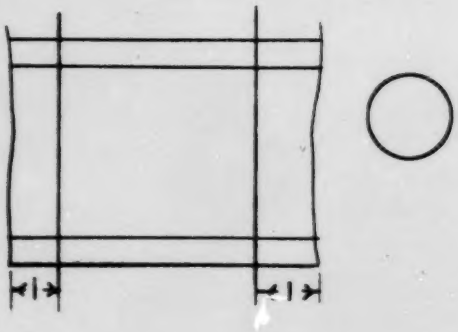
PROJECT MAINSTREAM

CHASSIS CONSTRUCTION LAYOUT

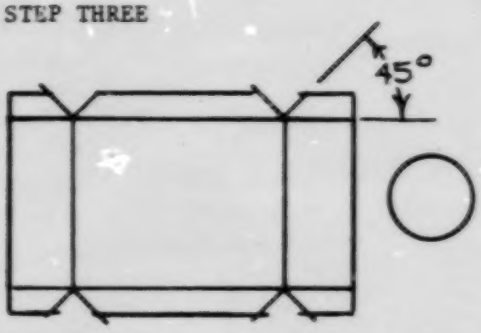
STEP ONE



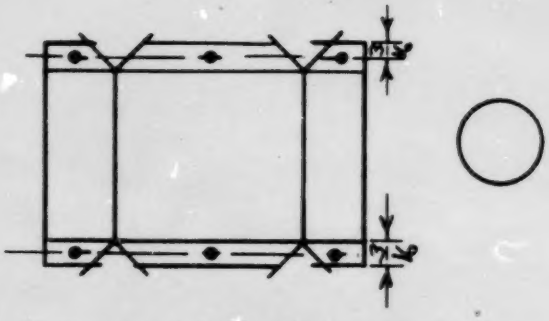
STEP TWO



STEP THREE

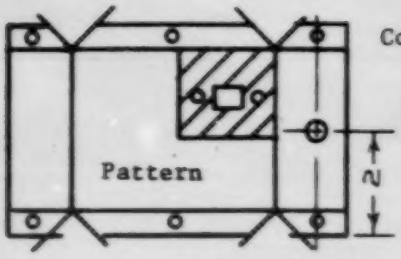


STEP FOUR



Measure proper distances to locate holes.

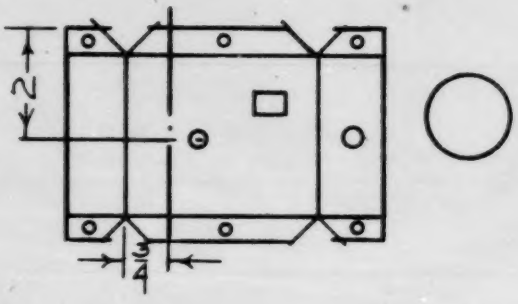
STEP FIVE



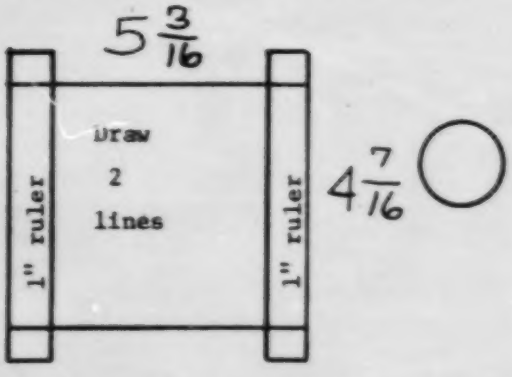
Connect with line.

Place pattern in corner and trace holes (3).

STEP SIX

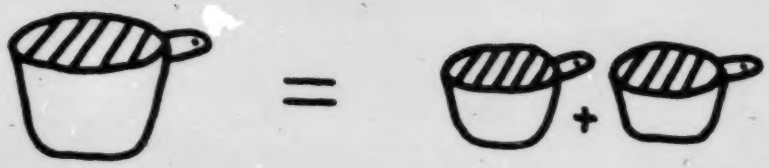


STEP SEVEN (2nd piece of metal)



LAYOUT GRADE
A
B
C
D
F

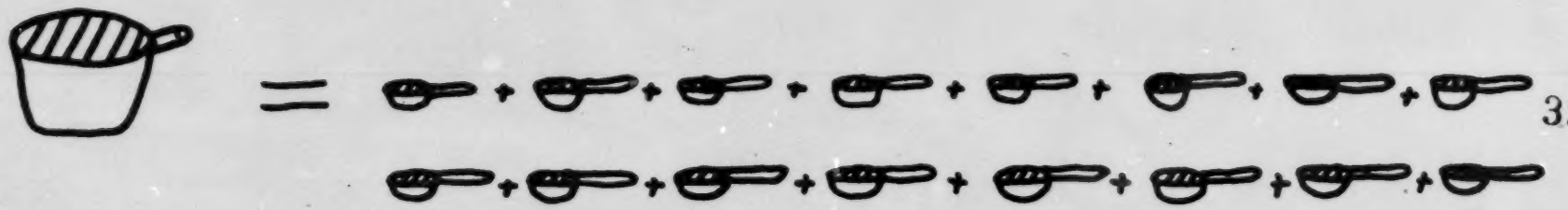
VOLUME MEASUREMENT



1 CUP = 1/2 CUP + 1/2 CUP

1 CUP = 1/3 CUP + 1/3 CUP + 1/3 CUP

1 CUP = 1/4 CUP + 1/4 CUP + 1/4 CUP + 1/4 CUP



1 CUP = 16 TABLESPOONS

31 32

BUSINESS CONTACTS

As part of the field testing phase of the project, each vocational educator was asked to supply the name of a person in the business community who would be willing to be interviewed by a handicapped student.

The educators had to find a person in a field related to their teaching area, e.g., a mechanical drawing teacher would contact an architect. This business contact agrees to be interviewed by a student for an informational purpose only. The student is not looking for a vocation. He/she is attempting to find information about a career. The interviews are very short and informal. Most students have asked questions concerning entry-level positions, salary, hours and general working conditions. Tours and/or visitations have been planned by many of our business contacts to acquaint students with actual work sites and work done in a particular area of their facility.

The names and occupations of some of our business contacts are:

Name or Title	Vocation
Frank Walsh	Tool & Die maker, Burlingame
Personnel Director	Hospital, Burlingame
Appointment Clerk	Hospital, Redwood City
Dick Trethric	Fast food restaurant, San Mateo
Dick Eymer	Janitorial Service, San Mateo
John Thornton	Millbrae telephone supplies
David Capps	Auto body work, Burlingame
Bill Slatkin	Automotive repair, Burlingame
Ray Perotti	Automotive parts, San Mateo
Bill Brewster	Artist - Illustrator, Burlingame
Carl Tresser	Auto body repair, Burlingame
Tom Thompson	Carpenter, Burlingame
Craig Anderson	Department store, San Mateo
Steve Chandler	Fabric store, San Mateo
Len Lender	Printing and embossing, San Francisco
Don Ulbricht	Printer, South San Francisco
Alfredo Benage	Interior design, Belmont
Verne Goodrich	Interior design, San Mateo
Barry C. Rafter	Architect, San Mateo
John Wheatman	Interior design, San Francisco
Personnel Director	Concrete treating, San Mateo
Richard Ferlita	Credit union, Burlingame
Mr. Quinn	Power equipment repair, Burlingame
Mr. Squire	Stockbroker, San Bruno
Jean Casey	United Air Lines, San Bruno

All of these contacts were obtained by members of the project and will be used as community resources for all vocational educators in the District.

INSTRUCTION TOPICS

During the seminars, many topics were given in-depth attention. The major topics listed below were either presented by the project director in the form of handouts and then discussed or came out of the preworkshop questionnaire as an area of specific interest to the general group.

The topics given major attention were:

- PL 94-142
- Individualized Educational Program (IEP)
- Individualized Instructional Program (IIP)
- Definitions and abbreviations of handicapping conditions
- Individual contracts
- Learning disability student characteristics
- Ways to recognize a learning disability student
- The 1977 N.E.A. Resolution on "Education For All Handicapped Children"
- Assessment teams--their responsibilities and functions
- Sex stereotyping
- Affirmative action
- Parent's role in the mainstreaming process
- What can the vocational educator offer a handicapped student
- Community resources
- AB 1250
- AB 65
- Communication with special education departments

PROJECT MAINSTREAM

DEAF

BLIND

H.I.P.

E.D.

T.M.R.

S.E.D.

AUT

E.M.R.

O.H.

F.H.

H.I.M.

L.H.

L.D.

B.D.

INDIVIDUAL CONTRACTS

The opportunity was given to each Project Mainstream participant to work on an individual contract basis to develop an invention, adaptation or process to help disadvantaged or handicapped students. A copy of this contract is shown on page 32. Each one of the following proposed contracts was reviewed by the project director and then approved. The project director and the originator agreed on the number of hours to be given on the contracts.

The following items were developed during the contract process:

Project	Teaching Area
- Measurement Training Aid	Industrial Education
- Job Cycle Functioning	Business Education and Special Education
- Business Math Drill	Business Education
- Catalogue Buying	Business Education
- Light Box Mirror Demonstration Table	Industrial Education
- Wheel Bearing Replacement Slides	Industrial Education
- Chassis Lubrication Slides	Industrial Education
- Contract Unit	Business Education
- Zipper Application	Home Economics Education
- Blouse Construction	Home Economics Education
- Skirt Construction	Home Economics Education
- Light Display Box	Industrial Education
- Enlarged Graph Paper Floor Plan	Home Economics Education
- Small Engine Part Locator	Special Education
- Small Engine Parts Display	Special Education
- Industrial Education Competencies	Industrial Education and Special Education

PROJECT MAINSTREAM

I, _____, as a vocational educator in the San Mateo Union High School District, agree to perform _____ hours of contract work in the development of inventions, techniques, strategies, and teaching aids to facilitate the learning process of a special education student scheduled into my vocational education curriculum.

The rate of pay I agree to is the workshop rate of $11.55 an hour, which will be paid upon completion of project(s).

Statement or Illustration of proposed project (use separate sheet if necessary):

Date of completion: _____

_____ Signature

_____ Kurt Krueger
Project Director

Approval date: _____

EVALUATIONS

Project Mainstream was divided into three distinctive phases in order to give the participants diversified types of learning experiences. The three phases were:

- Workshop
- Seminars
- Field Testing

Evaluations were conducted at the following times during the project:

- Pre-Workshop
- Post-Workshop
- At the conclusion of the seminars
- At the conclusion of the field testing phase.

All Project Mainstream participants were directly involved through questionnaires in every one of the evaluations. The following pages show the format used for the evaluations.

In addition to these written evaluations, Dr. Robert Weisgerber, the project's third-party evaluator, conducted his own written and consultative evaluations on all three phases of the project.

Project Mainstream

Pre-Workshop Questionnaire

1. As a special education student enters your room, what are your anxieties concerning this student? Please rate your most common anxieties or apprehensions on a 1 to 5 basis, with 1 being the most common.

   1. _____

   2. _____

   3. _____

   4. _____

   5. _____

2. How do you now receive information about special education students enrolled in your class? _____

   _____

3. How would you prefer to be given the information referred to in Ques. 2?

   _____

4. What do the initials I.E.P. stand for? _____

5. What is an I.E.P.? _____

   _____

6. What do the initials I.I.P. stand for? _____

7. What is an I.I.P.? _____

   _____

8. Name community agencies that deal with handicapped teenagers and adults.

   _____

9. Approximately how many times a semester do you confer with special education teachers about special education students? _____

10. What do you hope to achieve as being a part of this workshop? _____

    _____

    _____

Project Mainstream

Post-Workshop Questionnaire

Directions: Please check the lines which you feel represent your experiences during the workshop.

1. The packet of materials I received at the start of the workshop was

___ Very helpful

___ Adequate

___ Of little help

___ Not helpful

2. Presentation:

a. The total presentation by Mrs. Aiello was

___ Very helpful

___ Adequate

___ Of little help

___ Not helpful

b. The techniques and strategies presented by Mrs. Aiello were

___ Very helpful

___ Adequate

___ Of little help

___ Not helpful

3. The two-day workshop was

___ Well organized

___ Adequately organized

___ Loosely organized

___ Not organized

4. Meeting together in small groups was

___ The best way to use workshop time

___ An adequate way to use workshop time

___ A poor way to use workshop time

___ Of no use

5. My small group

___ Worked productively

___ Worked adequately

___ Accomplished little

___ Accomplished nothing

6. My overall reaction to the two-day workshop is

___ Excellent

___ Good

___ Fair

___ Poor

7. What is an I.E.P.?

8. What is an I.I.P.?

PROJECT MAINSTREAM

EVENING SEMINAR EVALUATION

DATE	PRESENTER	VERY USEFUL	SOMEWHAT USEFUL	OF LITTLE USE
9/20	Robert Bradfield San Francisco State University			
9/27	Cheryl Rubin Dept. of Rehabilitation			
10/4	Winifred Washburn Terra Nova High School			
10/11	Jean Wofford Direction Services Model			
10/18	Shirley Bishop PARCA			
10/25	Elsie Vickery Poplar Center			
11/1	Cheryl Cairns Easter Seal			
11/8	Janice Krones Center for Independent Living			

PROJECT MAINSTREAM

Evening Seminar

COMMENDATIONS

RECOMMENDATIONS

EVALUATION / SELF REPORT

The Project Mainstream inservice program in which you participated had a variety of objectives. You each expressed a variety of concerns and questions at the outset of the course. This evaluation is an effort at estimating the degree to which the objectives and your own interests were satisfied by the program of activities. YOUR RESPONSES WILL BE TREATED CONFIDENTIALLY. Please use the enclosed envelope for your response.

TO WHAT EXTENT DID THE MAINSTREAM COURSE INFLUENCE OR MODIFY YOUR READINESS TO DEAL EFFECTIVELY WITH THE HANDICAPPED STUDENT WHEN PERSON IS MAINSTREAMED INTO YOUR CLASSROOM?

(Enter a 1 in the column that shows your self rated readiness at the beginning of the course and a 2 in the column that shows your self rating of where you fall at the end of the course.)

TOPICS	Unprepared	Slightly prepared	Moderately prepared	Well prepared	Fully prepared
Information					
1. Awareness of responsibilities to the handicapped under the law.					
2. Awareness of school district policies and procedures relating to the implementation of the law.					
3. Functional knowledge about various handicapping conditions and their significance for vocational education.					
4. Specific knowledge about the learning disabled student and how instructional strengths and weaknesses are found.					
5. Awareness of available school resources and community resources that can be called upon for assistance.					
6. Understanding of the IEP structure and content and its relation to the IIP structure and content.					
Attitudes					
7. Personal sensitivity to the viewpoint of the handicapped and to the types of problems they encounter.					
8. Awareness of the achievements of the handicapped and their ability to function in society productively.					
9. Confidence in own ability to relate to the handicapped student and structure the course according to needs.					
10. Readiness to accept the assignment of a handicapped student together with regular students in your class.					

	Unprepared	Slightly prepared	Moderately prepared	Well prepared	Full prepared
Procedural					
11. Ability to identify and constructively address the elimination of instructional barriers (tangible & intangible).					
12. Ability to identify strengths and weaknesses in a particular handicapped student in terms of learning style.					
13. Ability to meet the individual student's needs while giving quality instruction to the non-handicapped students.					
14. Ability to modify the course requirements and standards in accordance with the individual's potential.					
15. Ability to locate and use supportive resources, including the school services and those in the community.					
16. Ability to design and develop instructional materials that are appropriate to the individual student's needs.					
17. Ability to carry out job/task analysis in respect to identifying the tasks that the student cannot do without help.					
18. Ability to facilitate the school-to-work transition by coordination of instruction with employment opportunities.					
19. Ability to contribute to IEP and IIP activities as requested by the school administration.					
20. Ability to help other teachers in their provision of services to handicapped students who are mainstreamed.					

What was the most helpful thing you learned in this course? _____

_____

What would you recommend to improve future classes of this type? _____

_____

How many handicapped students are you now teaching? _____

_____

Signed_____ School _____

(NOTE: Your signature will only be used to verify respondents and will not be made available to the Mainstream project staff.)

THAN YOU FOR YOUR EARLY RESPONSE!

MAINSTREAM PROJECT

FINAL EVALUATION

Your input on these items will be most useful in evaluating our Mainstream workshops. Please respond by circling the appropriate number in the two categories.

1) Value of topic - Was the topic presented relevant for presentation at this workshop?

2) Effectiveness of Presentation - Did the presenter teach you enough to have mastery of the topic?

WORKSHOP CONTENT	VALUE OF TOPIC				EFFECTIVENESS OF PRESENTATION				DID NOT ATTEND SESSION
	None	Little	Some	Great	Poor	Fair	Good	Excellent	No Response
September 8 & 9:									
Barbara Aiello - Mainstreaming: What it is and What to do About it. - I.E.P.'s - Value recognitions - Measurement system	1	2	3	4	1	2	3	4	N/R
September 20:									
Dr. Robert Bradfield - Behavior modification - district IEP form and explanations - handicapping conditions	1	2	3	4	1	2	3	4	N/R
September 27:									
Cheryl Rubin - Rehabilitation - developing a step by step measurement unit	1	2	3	4	1	2	3	4	N/R
October 4:									
Winifred Washburn - Mainstreaming and community colleges - developing voc. IEP - bypass techniques	1	2	3	4	1	2	3	4	N/R

October 11: Jean Wofford - Multimedia materials - district IIP - AB 1250	1 2 3 4	1 2 3 4	N/R
October 18: Shirley Bishop - Voc. Rehabilitation - sex stereotyping - business contacts	1 2 3 4	1 2 3 4	N/R
October 25: Elsie Vickery - Educational programs - visitation	1 2 3 4	1 2 3 4	N/R
November 1: Cheryl Cairns - Evaluations and experiences - visitation	1 2 3 4	1 2 3 4	N/R
November 8: Janice Krones - Handicapped views of voc. education - evaluation of speakers - recommendations - commendations	1 2 3 4	1 2 3 4	N/R

Objectives of the Project

The following objectives were written into the project to guide our efforts and to assist in measuring the degree to which we have been successful in assisting you with information and strategies for mainstreaming the handicapped.

Please read each objective statement and indicate the degree you feel the objective has been accomplished.

1. Vocational program teachers will acquire an understanding of the requirements of PL 94-142 and how this major piece of legislation affects the student composition of their classes.

   Evaluation: Teachers will actively participate in the workshop activities and will be able to describe how their programs may be affected.

   The information I received was:

   /___/ very complete.

   /___/ adequate.

   /___/ inadequate. I needed _____

2. Vocational program teachers will develop the knowledge to participate in writing Individualized Instructional Plans for those students who will be mainstreamed into their classes.

   Evaluation: Each teacher will develop one or more IIP's to be used as samples during the field testing phase.

   /___/ I developed a sample IIP and feel prepared to plan with a special education teacher FOR MAINSTREAMING students into my class.

   /___/ I developed a sample IIP but need a little help in working with our special education teachers.

   /___/ I do not feel adequately prepared to plan IIP's.

   Comment (optional): _____

   _____

3. Each project participant will be assisted to select and/or develop materials and instructional strategies to improve the support services for handicapped students enrolled in his/her classes.

   Evaluation: Each project participant will develop a personal strategy and information resource file to be used when field testing and when helping other teachers. Resource files will be available for evaluator verification.

   /___/ Yes, I have a collection of materials which can be used to improve support services for handicapped students.

   /___/ No, I was not able to prepare or select materials for use with handicapped students.

   Comment (optional): _____

   _____

4. Each project participant will be assisted to develop materials and instructional strategies to improve the learning environment for disadvantaged students enrolled in his/her vocational classes.

   Evaluation: Each project participant will develop a resource file for use with disadvantaged students. The files will be available for evaluator verification.

   /___/ Yes, I have a collection of materials which can be used to improve support services for disadvantaged students.

   /___/ No, I was not able to prepare or select materials for use with disadvantaged students.

   Comment (optional): _____

   _____

5. Vocational program teachers will receive and discuss information about nontraditional career and job opportunities for women, minorities and handicapped individuals so they can better counsel their vocational students.

   Evaluation: Program participants will be able to discuss the information received and how they utilized the material during the field testing phase of the project.

   /___/ Yes, I have received the materials and have used the information gained in class discussions or in individual discussions with my students.

   /___/ No. I have the materials but have not used the information with my students.

   Comment (optional): _____

   _____

6. Vocational program teachers will be assisted to develop the skills necessary to serve as consultants and resource persons to other vocational teachers in their departments for developing Individualized Instructional Plans and for implementing improved curricular services for disadvantaged and handicapped students.

   Evaluation: Each program participant will maintain a log of the consulting activities with his/her school.

   /___/ Yes, I have discussed mainstreaming and IIP's with my department colleagues and will provide assistance at their request.

   /___/ No, I have not consulted with others about the mainstreaming program and activities.

   Comment (optional): _____

   _____

Materials and Support Services

7. The materials I received at the two-day workshop and during the seminars were:

/___/ complete and helpful

/___/ complete, but not too helpful

/___/ somewhat helpful

/___/ inadequate

Comment (optional): _____

_____

8. The project director

/___/ was well organized, kept things moving and helped make good use of the workshop and seminar time.

/___/ did an adequate job of operating the project.

/___/ didn't quite satisfy our needs because

9. Your overall evaluation of the project:

/___/ excellent

/___/ average

/___/ poor

Suggestions and/or Comments on the Mainstream project - (in case we get funds for another group next fall):

_____

_____

_____

_____

_____

_____

OUTCOMES

The following outcomes were obtained by combining the evaluations of Kurt Krueger, Project Director, Dr. Curtis Larson, District Evaluator, and Dr. Robert Weisgerber, Third Party Evaluator.

Each objective will be stated and the consensus evaluation given. Where a consensus could not be obtained, each individual statement will be given.

The evaluation data for determining the degree of accomplishment of the eleven performance objectives written into the project were collected through observation, individual interviews and a final evaluation questionnaire which was completed by 100 percent of the project participants.

Project Objectives

1. The project director will be responsible for the following tasks:

   - Arrangement of classroom spaces
   - Completing contracts with presenters and third party evaluator
   - Managing the process for each of the three phases of the project.

   Evaluation: Contracts, room schedules and lists of personnel will be available for verification.

   Objective attained. The participants indicated that Mr. Krueger, the project director, was well organized, kept things moving and helped them make good use of their time. All contracts have been completed and participants paid as of February 15, 1979.

2. Vocational program teachers will acquire an understanding of the requirements of PL 94-142 and how this major piece of legislation affects the student composition of their classes.

   Evaluation: Teachers will actively participate in the workshop activities and will be able to describe how their programs may be affected.

   Completed. There was a high interest level on the part of all participants during the two-day workshop and each of the eight seminar sessions. There was only one seminar in which two persons thought the presentation was not of value. Questionnaire responses averaged 16 of 21 participants who rated the topics of some or great value. The vast majority further indicated the information they received was very complete and useful. Teachers were much better informed on this topic than previous to their attendance.

3. Vocational program teachers will develop the knowledge to participate in writing Individualized Instructional Plans for those students who will be mainstreamed into their classes.

   Evaluation: Each teacher will develop one or more IIP's to be used as samples during the field testing phase.

   Partially attained. All teachers developed an IEP during the first workshop, and 21 of 22 teachers developed an IIP sample for field testing during the seminar series. As a result of their experience, 6 teachers feel confident to develop IIP's and assist their colleagues, and 10 teachers developed IIP's but feel the need for a little more help with IIP's before feeling competent.

4. Each project participant will be assisted to select and/or develop materials and instructional strategies to improve the support services for handicapped students enrolled in his/her classes.

   Evaluation: Each project participant will develop a personal strategy and information resource file to be used when field testing and when helping other teachers. Resource files will be available for evaluator verification.

   Partially attained. All participants received a good selection of materials for use. Twelve reported they feel confident to use the materials. Six persons indicated they were not confident about their materials and strategies for use in helping other teachers. It should be noted that several teachers did not make materials or make any apparent attempt at building resource files for their rooms even though the project director provided special incentives for them to do so. In part this might be attributable to their not having handicapped students in their classes at the time, but this was not the only reason. In the main the materials were useful for the needs of particular types of handicapped students. While the ideas were good some of the actual workmanship was marginal. Subjectively, from a perspective of the third party evaluator, the most outstanding efforts were:

   Business: Simplification of the textbook for the study of contracts.

   Home economics: Step-by-step instructions sheets in sewing.

   Work experience: Crises training aid in booklet form.

   Industrial arts: Overhead mirror.

   Special education: The new IIP form for use with competency manual.

   These projects clearly showed an awareness of the special needs of the handicapped and required substantial effort to prepare.

5. Each project participant will be assisted to develop materials and instructional strategies to improve the learning environment for disadvantaged students enrolled in his/her vocational classes.

   Evaluation: Each project participant will develop a resource file for use with disadvantaged students. The files will be available for evaluator verification.

   Partially attained. All teachers were assisted to develop a collection of materials for use with disadvantaged students. Fourteen participants responded they had accomplished the objective while six participants did not feel confident about working with disadvantaged students using the workshop materials. On a subjective basis, many of the materials that were turned in as part of the materials development effort could have applicability to the disadvantaged though they were primarily intended to be used with the handicapped.

6. Vocational program teachers will receive and discuss information about nontraditional career and job opportunities for women, minorities and handicapped individuals so they can better counsel their vocational students.

   Evaluation: Program participants will be able to discuss the information received and how they utilized the materials during the field testing phase of the project.

   Partially attained. All participants received and discussed materials during the seminar series. Nine individuals reported they had used the materials in their classes and with colleagues, while nine reported they had not used the materials with their students. Teachers seemed more aware of the variety of ways that special populations persons could become gainfully employed.

7. Vocational program teachers will be assisted to develop the skills necessary to serve as consultants and resource persons to other vocational teachers in their departments for developing Individualized Instructional Plans and for implementing improved curricular services for disadvantaged and handicapped students.

   Evaluation: Each program participant will maintain a log of the consulting activities with his/her school.

   Partially attained. The mainstreaming process has a high degree of interest and vocational teachers need to be a viable part of planning for mainstreaming prior to handicapped students being placed in vocational classes. Teachers' ratings indicated that they were better prepared than before the class but still felt that they lacked the ability to assess the student's strengths and weaknesses and develop specific course plans that reflected unique needs.

8. The project director will assemble sets of resource documents covering services, instructional materials, and instructional strategies which can be reproduced and distributed to district vocational teachers, other school districts, and the California State Department of Education.

   Evaluation: The dissemination packages will be completed within ten workdays following the final evaluation of the project.

   This is in process and should be completed on schedule.

9. The materials and strategies developed during the workshop phases of the program will be field tested during the fall semester of 1978-1979.

   Evaluation: The project director and district coordinator of career and vocational education will observe and interview participants during the field testing phase. Observation notes will be used in writing the interim and the final evaluations.

   Attained. Some very interesting and useful products were developed for homemaking, photography, drafting, business education and auto-mechanics.

10. The project activities will be evaluated by the project director and the district coordinator of career and vocational education at the conclusion of the two-day workshop, the eight seminar sessions and the end of the field testing phase.

    Evaluation: Observation notes and teacher evaluation questionnaire responses will be included in the evaluation reports produced at the end of each phase of the project.

    Attained.

11. A third party evaluator will assess the project activities at the end of the inservice phase and complete a final evaluation at the end of the field testing phase in February, 1979.

    Evaluation: The final evaluation documents will be included with the dissemination package and the claim for funds.

    Attained.

CONCLUSIONS

Overall, it seems clear that most participants had gained quite a bit of information regarding community resources and they gained a better understanding of the problems and point of view of the handicapped. They engaged in class discussions expressing diverse viewpoints, some of which were not especially supportive of the need to integrate the handicapped in the regular vocational program (arguing that a better structure of teaching could be achieved in small segregated classes), but the general flavor of the outcomes from class discussion was positive and hopeful.

It appears from observation and interviews that one major result of the mainstream project is the establishment of productive communications and planning between teachers of vocational subjects and teachers of the learning disabled, mentally retarded, physically handicapped and hearing impaired students.

The project director was able to create an atmosphere where teachers from industrial education, business, homemaking, trade and industry, and special education felt safe and free to have some in depth discussions, to air differences, exchange heated opinions, but still work together to improve conditions for handicapped and disadvantaged students. We feel the benefits of these exchanges and the new cooperative friendships will have long-lasting effects.

Other accomplishments not reflected in the objectives section are:

- All project participants are far more aware of community agencies and resources for aid and training for handicapped individuals.

- The project director and participants have completed the groundwork for a district administrative procedure which will require that vocational teachers be involved in developing Individualized Instructional Plans in advance of students' being mainstreamed into the teacher's vocational classes.

- Two business education teacher participants have developed a special summer school offering in Job Skills. The Job Skills course is based on the 12 common core competencies in the Business Education Program Guide. This offering will be written as a CETA Summer Youth Project in March, 1979.

In closing, it should be stated that the project director accomplished a great deal on a limited budget and with only minimum time with the teachers each week.

CERTIFICATE OF RECOGNITION

This is to certify that

_____

has successfully completed the Inservice Training Program

PROJECT MAINSTREAM

conducted during the fall semester 1978, through the San Mateo Union High School District

CAREER & VOCATIONAL EDUCATION

PROJECT DIRECTOR _____

DATE _____

RELATED RESEARCH

Career Exploration and Preparation for the Special Needs Student. L. Allen Phelps and Ronald J. Lutz, Allyn & Bacon, Inc., 1978.

Developing a General Understanding, Mainstreaming the Handicapped in Vocational Education. Robert Weisgerber, American Institutes For Research, 1977.

Developing a Plan for Action, Mainstreaming the Handicapped in Vocational Education. Robert Weisgerber, American Institutes For Research, 1977.

Developing a Positive Attitude, Mainstreaming the Handicapped in Vocational Education. Richard Bond, American Institutes For Research, 1977. (*)

Education of Exceptional Learners. Frank M. Hewett, Allyn & Bacon, Inc., 1977.

Exceptional Teaching. Owen R. White and Norris G. Harding, Charles E. Merrill Publishing Co., 1976.

Mainstreaming Children With Learning Disabilities. Ferris O. Henson and Thomas N. Fairchild, Learning Concepts Co., 1976.

Mainstreaming Exceptional Children. Ferris O. Henson and Thomas N. Fairchild, Learning Concepts Co., 1977.

Mainstreaming Guidebook for Vocational Educators. Peter R. Dahl, Judith Appleby and Dewey Lipe, American Institutes For Research, 1978.

Mainstreaming, Making It Work in the Classroom. Education Today Company, Inc., 1978.

Mainstreaming: What It Is and What To Do About It. Barbara Aiello, Learning Institute, 1978. (*)

Non-Discrimination on the Basis of Handicap. (the 504 Regulations) The Federal Register, Vol. 42, #86, May 4, 1977.

Public Policy and the Education of Exceptional Children. Frederick Weintraub, The Council For Exceptional Children, 1977.

Teaching Children With Learning and Behavior Problems. Donald D. Hammill and Nettie R. Bartel, Allyn & Bacon, 1978.

(*) A copy of these publications was given to each project participant.

The Education of All Handicapped Children Act. PL 94-142, The Federal Register, Vol. 42, #163, August 30, 1977.

Vocational Education of the Handicapped Students. Sharon Davis, The Council For Exceptional Children, 1978.

Vocational Entry Skills For Secondary Students. Winifred Y. Washburn, Academic Therapy Publications, 1975. (*)

(*) A copy of these publications was given to each project participant.

DISSEMINATION

The guidelines, products and strategies produced during Project Mainstream are directed toward three populations:

1. Business education teachers and their students

2. Consumer homemaking teachers and their students

3. Industrial education teachers and their students.

The evaluation findings and the materials developed during the workshop could be useful in business education, homemaking and industrial education in secondary schools throughout the State.

At the conclusion of the project, the materials will be distributed as follows:

- Each vocational program teacher in the San Mateo Union High School District
- Jefferson Union High School District
- South San Francisco Unified School District
- Sequoia Union High School District
- La Honda Pescadero Unified School District
- California State Department of Education
- California Regional Resource Center, Los Angeles
- The Continuum, Inc., Del Norte County
- State Department of Rehabilitation.

FOLLOW UP SUGGESTIONS

Suggestions For Future Inservice

- Conduct more visits to agencies which train or support the handicapped at a time when the clients are present.
- A segment on counseling the handicapped be included.
- More "hands on" activities be developed for writing IIP's for actual students.
- More interdisciplinary group work for participants.
- Project funds be used to reduce class size.
- One participant suggested we change speakers and topics and do it all over again so that he could be involved in more experiences to help the handicapped.
- District level staffs--both special education and vocational education--work together to follow through with more "hands on" practice for participants.
- School level special educator/vocational educator teams could be organized to share their expertise to the benefit of actual handicapped students newly mainstreamed into vocational classes in the spring semester.
- Have for guest speakers:
    1. A school psychologist
    2. Parents of E.H. students.
- Develop a district policy regarding the process of mainstreaming E.H. kids.
- More small group work.
- Involve more special education teachers.